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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,132	05/29/2001	Knut E. Rasmussen	01-11 US	9635
7590 12/13/2007 Varian Inc 3120 Hansen Way M S D 102 Palo Alto, CA 94304			EXAMINER VENC, DAVID J	
			ART UNIT 1641	PAPER NUMBER
			MAIL DATE 12/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/857,132

Applicant(s)

RASMUSSEN ET AL.

Examiner

David J. Venci

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on August 23, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Examiner acknowledges Applicants' Notice of Appeal and Appeal Brief, filed February 26, 2007, and August 23, 2007, respectively.

During an Appeal Conference held on November 16, 2007, the undersigned including Supervisory Patent Examiner Long Le and Quality Assurance Specialist Robert Wax principally determined to withdraw rejection of claims 42-47 under 35 U.S.C. 102(b) in view of Ross (US 3,429,785).

Accordingly, the finality of the previous Office Action is withdrawn. Herein, Examiner makes new rejection of claims 42-47 under 35 U.S.C. 103(a) in view of Ross (US 3,429,785) and Simon *et al.* (US 3,647,666).

Claims 42-47 are pending and under examination.

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Specification

The disclosure is objected to because of the following informalities.

Throughout the specification, the recitation of "liquid-liquid-liquid" is not clear. The identity of three liquid species belonging to "liquid-liquid-liquid" is not clear.

On p. 12, third paragraph, sixth sentence, the recitation of "The hollow fibre" is not clear because Examiner is unable to discern a "fibre" in preceding sentences.

On p. 8., third paragraph, fourth sentence, the phrase "The solvent forming the membrane" is not clear in view of p. 7, lines 3-4, phrase "The membrane acts as a clean-up barrier between two aqueous phases" is not clear in view of Fig. 3 or Fig. 4. Resolution is required.

The amendment filed September 18, 2006, is objected to for the following:

On page 6, the paragraph inserted after "The principles of LLLME will be explained in more detail below", second sentence phrase "the second liquid is the liquid membrane" is not clear. Examiner is unable to discern the objects referenced by said phrase in either Fig. 3 or Fig. 4.

Correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross (US 3,429,785) in view of Simon *et al.* (US 3,647,666).

Ross describes a method comprising the steps:

- (1) providing a first container (see Fig. 6, container comprising test solution 72) having a sample solution (see Fig. 6, test solution 72) comprising a dissolved analyte (see Abstract, "ionic species");
- (2) providing a second container (see e.g., Fig. 1, ion sensitive electrode 20) with a membrane wall (see e.g., Fig. 1, membrane 22) having fiber pores (see e.g., col. 5, lines 17-18, "porous polyethylene");
- (3) filling the second container with an acceptor solution (see e.g., Fig. 1, ion exchanger liquid 24);
- (4) lowering the second container into the first container (see Fig. 6, container comprising ion sensitive electrode 50);

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(5) stirring the sample solution (see col. 8, lines 8-9, "[s]teady state conditions of potential were established");

Ross does not teach:

(6) removing analyte enriched acceptor solution *from* the second container.

However, Simon *et al.* describe an electrode design having a detachable base (see Fig. 1, electrode base 10) for removing acceptor solutions (see col. 4, lines 2-3, "exchange of the reference solution") from the electrode.

It would have been obvious for persons of ordinary skill to perform Ross' method with Simon's electrode design because Simon says his design allows for easy and rapid replacement of ion-exchange membranes and acceptor impregnates (see col. 4, last paragraph)).

Simon *et al.* also describe the claimed "stirring" step (see col. 2, line 26, "agitated").

Response to Arguments

Claim Rejections - 35 USC § 112

In prior Office Action, claim 42 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite because the passive voice recitation "equilibrium is established" was considered not clear. The identity of object(s) and/or step(s), if any, required for performing "establishing" is/are not clear. Whether the objects and/or steps required for "establishing equilibrium" are coextensive with the objects and/or steps required for "stirring" is not clear.

Applicants' argumentation on this issue is moot in view of an Appeal Conference held on November 16, 2007, wherein the undersigned including Supervisory Patent Examiner Long Le and Quality Assurance Specialist Robert Wax principally determined to withdraw this rejection. Accordingly, this rejection is withdrawn.

Claim Rejections - 35 USC § 102

In prior Office Action, claims 42-47 were rejected under 35 U.S.C. 102(b) as being anticipated by Ross (US 3,429,785).

Applicants' argumentation on this issue is moot in view of an Appeal Conference held on November 16, 2007, wherein the undersigned including Supervisory Patent Examiner Long Le and Quality Assurance Specialist Robert Wax principally determined to withdraw rejection of claims 42-47 under 35 U.S.C. 102(b) in view of Ross (US 3,429,785).

Accordingly, this rejection is withdrawn. Set forth *supra* are new grounds for rejection of claims 42-47 under 35 U.S.C. 103(a) in view of Ross (US 3,429,785) and Simon *et al.* (US 3,647,666).

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Applicants' argumentation with respect to Ross is not sufficient to overcome *the combined* teachings of Ross and Simon *et al.* Specifically, Ross describes establishing a "steady state condition" between a sample solution and an ion-exchange electrode (see col. 8, lines 8-9), while Simon *et al.* describe the concept of "agitating" analyte solutions while using ion-selective electrodes (see col. 2, line 26). In combination, these two passages teach Applicants' claimed "stirring" step.

With respect to the language "until equilibrium is established between analyte in said sample solution and analyte in said acceptor solution by passing of analyte through said membrane wall", Ross describes establishing a "steady state condition" between a sample solution and an ion-exchange electrode (see col. 8, lines 8-9), wherein a "redox process" and an "interchange of ions" occurs at an analyte-electrode interface (see col. 1, line 50; col. 2, lines 13-14). Such an "interchange of ions" occurs through a membrane wall because the "interchange of ions" occurs at an analyte-electrode interface between an analyte solution outside the membrane wall (see Fig. 6, test solution 72) and an ion exchanger liquid inside the electrode (see e.g., Fig. 1, ion exchanger liquid 24). Outside → inside = through the membrane wall.

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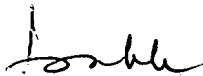
Conclusion

No claims are allowable at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Venci whose telephone number is 571-272-2879. The examiner can normally be reached on 08:00 - 16:30 (EST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Assistant Examiner
Art Unit 1641

djv



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